

WHAT IS CLAIMED IS:

1. A circuit board manufacturing method, comprising:

forming, on a first substrate, a transfer chip including a thin-film electrical circuit formed of stacked films and a plurality of first pad electrodes used as connection terminals to establish connections between the thin-film electrical circuit and another circuit;

forming a second substrate including electrical circuit wiring and a plurality of second pad electrodes connected to the electrical circuit wiring and arranged in a transfer target region, the second pad electrodes being respectively associated with the first pad electrodes provided on the transfer chip; and

transferring the transfer chip on the first substrate to the transfer target region on the second substrate to connect the thin-film electrical circuit to the electrical circuit wiring, thereby forming a circuit board;

the first pad electrodes being arranged over the entire surface of the transfer chip and covering at least one of thin-film elements and thin-film wiring included in the thin-film electrical circuit provided below the first pad electrodes, tops of rough surface portions of the pad electrodes having approximately the same height.

2. The circuit board manufacturing method according to claim 1, further including adjusting the heights of the tops of the rough portions of the first pad electrodes by adding height adjusting films when forming the thin-film elements or the thin-film wiring.

3. The circuit board manufacturing method according to claim 1, the forming of the second substrate including forming the second pad electrodes to cover the electrical circuit wiring provided therebelow, whereby the tops of rough surface portions of the second pad electrodes have approximately the same height.

4. The circuit board manufacturing method according to claim 3, further including adjusting the heights of the tops of the rough portions of the second pad electrodes by adding height adjusting films when forming the electrical circuit wiring.

5. The circuit board manufacturing method according to claim 1, the first pad electrodes having the same film structure of the stacked films in regions associated with the tops.

6. The circuit board manufacturing method according to claim 1, the second pad electrodes having the same film structure of the lower stacked films in regions associated with the tops.